



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUN 8 1998

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Linda R. Hamilton  
ALCOA  
300 North Hall Road  
Alcoa, TN 37701

Dear Ms. Hamilton,

This letter responds to your June 1, 1998 inquiries to Nora Lopez of EPA Region 2 in which you ask questions concerning the reporting requirements under section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA). Your questions pertain to the reporting of aluminum fumes and polycyclic aromatic carbons (PACs) combusted on-site.

Your first question concerns aluminum metal that is melted at an EPCRA section 313 covered facility. From the molten aluminum a vapor is generated. Upon exposure to the air at the temperatures present in the furnace, the aluminum vapor partially oxidizes and condenses to form aluminum fume. All stack emissions from the furnace are released as non-fibrous aluminum oxide. You ask if the release from this melting furnace should be counted as aluminum fume or should be reported as zero since it is no longer a TRI reportable chemical.

Aluminum fume, an EPCRA section 313 toxic chemical, is comprised of dispersed solid aluminum particles, aluminum oxide particles and an aluminum vapor. The facility is manufacturing aluminum fume in its furnace. However, as you indicate, before the fume leaves the furnace stack, all of the aluminum fume converts to non-fibrous aluminum oxide, a non-reportable chemical. The facility is not actively destroying the aluminum fume. Instead the fume passively converts under the conditions of the furnace to a non-reportable chemical. In this instance, therefore, the facility is not treating the toxic chemical for destruction. If the covered facility generates more than 25,000 pounds of aluminum fume during the course of the year, it would meet the manufacturing threshold for this chemical and would be subject to EPCRA section 313 reporting. However, the facility should report zero releases and other waste management activities for aluminum fume.

You should note that if this facility does not release or otherwise manage as a waste more than 500 pounds for aluminum fume, and the amounts manufactured, processed, or otherwise used do not exceed one million pounds, the facility may submit the Form A certification statement instead of the Form R.

In your second question, EPCRA section 313 listed polyaromatic compounds (PACs) are used as binders for coke in carbon anodes. During the process, the anodes are baked in a ring furnace and the PACs are combusted. The heating value of the PACs (greater than 5000 Btus/lb) allow for a reduction in the use of natural gas. You ask if the amount of the PACs combusted should be reported as burned for energy recovery on the Form R.

As you may know, EPA has not yet promulgated regulations pursuant to the Pollution Prevention Act defining "combustion for energy recovery." However, in the situation you describe, the EPCRA section 313 chemicals are being burned in the process, not as a waste management activity. Toxic chemicals reported as released or otherwise managed as waste on Form R, including quantities reported as combusted for energy recovery, should not include toxic chemicals consumed during processing activities. Therefore, the PACs combusted as part of your process in the ring furnace do not need to be included as combusted for energy recovery under EPCRA section 313.

I hope this information is helpful to you in making threshold determinations and release and other waste management calculations for EPCRA section 313. If you have any other questions, or desire further information, please call either Sara Hisel McCoy, of my staff, at 202.260.7937 or me at 202.260.9592.

Sincerely,

A handwritten signature in black ink, appearing to read "Maria J. Doa", with a long horizontal flourish extending to the right.

Maria J. Doa Ph.D., Chief  
Toxics Release Inventory Branch

cc: IG system  
Nora Lopez, EPA Region 2